Combining Command Readiness Processes to Increase Efficiency and Compliance Using a Lean Six Sigma Approach

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Introduction

The Individual Medical Readiness Process (IMR) at the command was not well understood and led to frustration, lost productivity and decreased morale of the active duty military staff members. The location of the offices involved in the process were scattered throughout the campus, and the whole process took days to complete. Although compliance with staff readiness was high, numerous staff complaints were submitted via the Hassle Factor on-line staff reporting system. This system allowed staff members an outlet to anonymously report issues they felt needed improvement or decreased their productivity at the command.

The command leadership challenged the Command Process Improvement Office to implement improvements to the process that would clearly define and streamline the readiness process while at the same time improve compliance rates, decrease lost work hours and improve staff members' perception of the process.

The first goal was to decrease the command baseline for indeterminate readiness on the annual Physical Health Assessment (PHA) which was at 5.74% and was defined as the number of command staff members in an indeterminate (unknown) readiness status divided by total number of active duty staff members not deployed.

A second goal was to reduce the number of process steps in the current process.

Methods

A Lean Six Sigma (LSS) Project team was formed and championed by the Director of Public Health/Branch Medical Clinics as well as the Director of Dental Services. The team consisted of the Command LSS Black Belt, a senior dental officer, the Senior Nurse of the Military Health Department, The Plans, Operations and Military Intelligence (POMI) Office Division Officer, a dental technician, a POMI corpsman, the Business Managers from both Optometry and the Otolaryngology and Audiology Departments, a nurse from the Breast Health Department, a Medical Readiness Reporting System (MRRS) corpsman and the command Security Manager.

The "Voice of the Customer" was obtained from the Hassle Factor Survey. Command staff members were clearly frustrated with the current process and felt the process was redundant, lengthy and confusing. The LSS group used LSS methodology to create a process map of the current IMR process. The IMR process map was used to create a Value Stream Map that the group then used to identify value added steps in the process, non-value added steps and steps that non-value added but required steps in the current process. The non-value added but required steps in the process were those steps that did not add value but were required by instruction or policy and could not be eliminated.

A Cause and Effect Diagram was also created by the group. The Cause and Effect Diagram identified four major potential causes of the staff frustration and cumbersome process. The four major causes identified were the numerous data systems used in the process, the physical layout of the command and distance traveled, two separate and competing readiness process, the IMR process under discussion and the POMI R-Status Process, and the last major cause was lack of compliance with the process.

A Failure, Modes and Effects Analysis was also performed by the group. This analysis identified the number one cause of staff frustration and dissatisfaction with the readiness process as two separate readiness processes with similar steps. Many personnel confused the two processes and used the IMR Readiness, R-Status, and PHA/Dental Process terms interchangeably.

At this point, the Director for Administration was informed of the analysis and joined the other champions to support the LSS group's efforts in looking for a way to use each readiness process to compliment the other.

Six months of historical data were used as a baseline. The MRRS database, POMI (EMPARTS) database and Dental (DENCAS) databases were all employed to identify trends and numbers of noncompliant personnel. Each department's number of records varied by month but all remained between 3387 and 3566 personnel.

POMI team members also furnished the group with a list of the number of personnel, along with birthday information, each month of the year, and MRRS furnished the group data on the number of personnel checking into MRRS each month for either IMR Readiness or R-Status. MRRS also provided dated on the number of personnel that had their last PHA appointment on their birth month. The Security Office provided data on 3352 personnel that they tracked for security clearance compliance.

Results

The birth month data were compared with the MRRS check-in data. The LSS group theorized that a properly operating process would only require an individual to report to MRRS once for prescreening since the actual PHA appointment did not require a MRRS visit. The comparison revealed that MRRS had roughly twice the number of personnel checking in for visits as the

number of birthdays that were reported for each month. Second, the MRRS data also revealed that 81% of all staff member's PHA dates were not on their birth month but the R-status dates were required on the birth month. The R-status readiness required many of the same stops that were required by the IMR readiness process that was being completed by individuals at a different time each year.

POMI Corpsmen were give access to the MRRS database early in the process in an effort to ensure database accuracy and improve compliance with the R-status process. MRRS database access for POMI personnel immediately began showing positive results. At the beginning of the process POMI had a 58% compliance rate on R-status as of February 2011 and the compliance rates improved each month and were at 82% in June 2011.

Analysis of the Security Office data revealed that 3019 out of 3352 personnel were compliant with all security clearance requirements. The Security Office uploaded its database to the MRRS SharePoint site and gave access to MRRS Corpsmen so the security status could be checked by MRRS personnel on the initial MRRS visit, eliminating the need for the vast majority of personnel to visit the Security Office.

Both readiness processes were combined into a readiness future ideal state process map. On 01 October 2011, the new combined readiness processes were fully implemented. The POMI Office realigned every staff member's R-status date to his or her current PHA date. Birth month was eliminated as the determining factor for readiness in favor of the PHA anniversary date since 81% of staff members were already off their birth month for their annual PHA appointment. All readiness now starts in the MRRS Office, thus, previous redundant steps are now combined into one process.

Upon implementation of the combined process, five process steps were either completely eliminated or consolidated. This immediately decreased trips to the Security Office by 3019 trips annually and decreased redundant visits to both MRRS and the Dental Department by 2718 trips annually.

The Information Technology (IT) Department developed an innovative way to notify all personnel 30 days prior to expiration of their annual PHA or Dental exam. When any member within 30 days of expiration of his/her PHA or Dental exam attempts to access the command intranet or internet, a notification screen appears with a notification of the requirement for him/her to complete their annual exams. Members simply click acknowledgment of the requirement, and they are immediately returned to their homepage. The new system eliminates the email notification that has become a visual white noise and is routinely ignored. The system automatically builds a database of compliant and non-compliant personnel that can be used to track MRRS. The automatic database eliminated 18 hours per week of work by MRRS Corpsmen previously spent compiling the database manually to track compliance. Business rules were developed to guide personnel in all areas affected by the new combined process. Since

many individuals begin the readiness process at outlying clinics under this command's authority, outlying clinic personnel were trained in the new process, and a limited number of personnel were given access to the Security Clearance SharePoint site.

The IT Department estimated the one time level of effort to build the new notification system at 48 man-hours and stated that sustainment would be no more than that required for a screensaver program.

Approval was obtained from the project champions at each step of the process, and final implementation steps were approved by the full Executive Steering Committee.

After the initial month of monitoring, the new process resulted in an indeterminate rate of 3.8%, a reduction of 2.74%.

Conclusion

Initial feedback from staff members has been positive. The new process has eliminated time and effort required to complete the annual readiness process and has improved compliance. Although the new program resulted in shifting some of the workload from POMI to the Military Health Department, the time saved by the automated notification system reports more than offset the additional time required to complete the few additional tasks.

These results could easily be replicated to other commands, since these readiness requirements are mandated Navy wide. As with most programs in the military system, continued training and monitoring of staff members will be required to ensure continued sustainment.